English

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1 Intended Use, Contraindications and General Precautions

Intended Use

The Inogen One® G2 Oxygen Concentrator is used on a prescriptive basis by patients requiring supplemental oxygen. It supplies a high concentration of oxygen and is used with a nasal cannula to channel oxygen from the concentrator to the patient. The Inogen One® G2 may be used in home, institution, vehicle, on an airplane and various mobile environments.

CAUTION	USA Federal law restricts this device to sale by or on the order of a physician. May also be applicable in other countries.

WARNING	Availability of an alternate source of oxygen is recommended in case of power outage or mechanical failure. Consult your equipment provider for type of back-up system recommended.

CAUTION	It is the responsibility of the patient to make back-up arrangements for alternative oxygen supply when traveling; Inogen assumes no liability for persons choosing not to adhere to manufacturer recommendations.

Contraindications

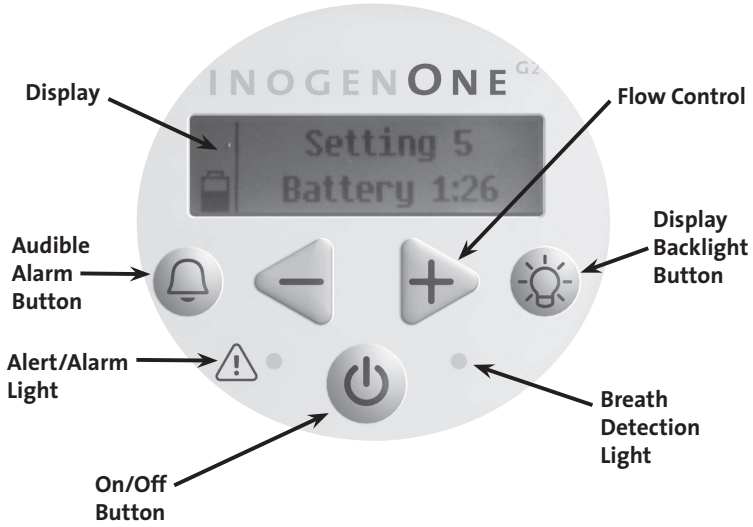
WARNING	This device is NOT INTENDED to be life sustaining or life supporting.
CAUTION	Under certain circumstances, the use of non-prescribed oxygen therapy can be hazardous. This device should be used only when prescribed by a physician.
CAUTION	Additional monitoring or attention may be required for patients using this device who are unable to hear or see alarms or communicate discomfort. If the patient shows any signs of discomfort, a physician should be consulted immediately.
CAUTION	The Inogen One® G2 is not designed or specified to be used with a humidifier or nebulizer. Use of this device with a humidifier or nebulizer may impair performance and/or damage the equipment.

General Precautions

WARNING	The device produces enriched oxygen gas which accelerates combustion. Do NOT ALLOW SMOKING OR OPEN FLAMES within 10 feet of this device while in use.
WARNING	Do not submerse the Inogen One® G2 or any of the accessories in liquid. Do not expose to water or precipitation. Do not operate in rain. This could lead to electrical shock and/or damage.
CAUTION	Do not use oil, grease, or petroleum-based products on or near the Inogen One® G2.
CAUTION	Never leave the Inogen One® G2 in an environment which can reach high temperatures, such as an unoccupied car in high temperature environments. This could damage the device.

2 Description of the Inogen One® G2 Oxygen Concentrator

Important Parts of the Inogen One® G2 Oxygen Concentrator



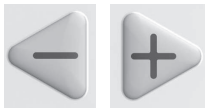
User Controls

ON / OFF Button
Press once to turn “ON”; Press and hold for one second to turn “OFF”.

Audible Alarm Button
Pressing this button will toggle the Inogen One® G2’s breath detection alert on and off:

1. Default Mode. When the Inogen One® G2 is powered up, the breath detection alert is disabled. The display’s mode indication area is empty in Default Mode.
2. Breath Detection Alert Mode. The Inogen One® G2 will alert with audible and visual signals for “no breath detected” when this mode is enabled and no breath has been detected for 60 seconds. The display’s mode indication area will show a bell icon when the alert is enabled.

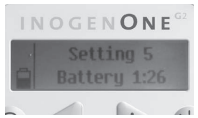
Flow Setting Control Buttons
Use the – or + flow setting control buttons to select the setting as shown on the display. There are five settings, from 1 to 5.



Display Backlight Button
Push on; automatically turns off.

User Interfaces

Display
This screen displays information regarding flow setting, power status, battery life and errors. If you would like to change the language on the Inogen LCD Screen contact Inogen Client Services.



Indicator Lights
A red light indicates either a change in operating status or a condition that may need response (alarm). A flashing light is higher priority than non-flashing.

Audible Signals
An audible signal (beep) indicates either a change in operating status or a condition that may need response (alarm). More frequent beeps indicate higher priority conditions.

Input / Output Connections

Particle Filter
The filter must be in place at the intake end of the concentrator during operation to keep input air clean.

Cannula Nozzle Fitting
The nasal cannula connects to this nozzle for Inogen One® G2 output of oxygenated air.

DC Power In
Connection for power connection from the Universal Power Supply.

Power Supply Options

12-Cell Rechargeable Lithium Ion Battery
The battery will power the Inogen One® G2 without connection to an external power source. When fully charged, the battery will provide 2 to 4 hours of operation. The battery recharges when properly installed in the Inogen One® G2 and the concentrator is connected to AC or DC power. Recharging time is up to 4 hours. See information in the "Battery Care and Maintenance" section.

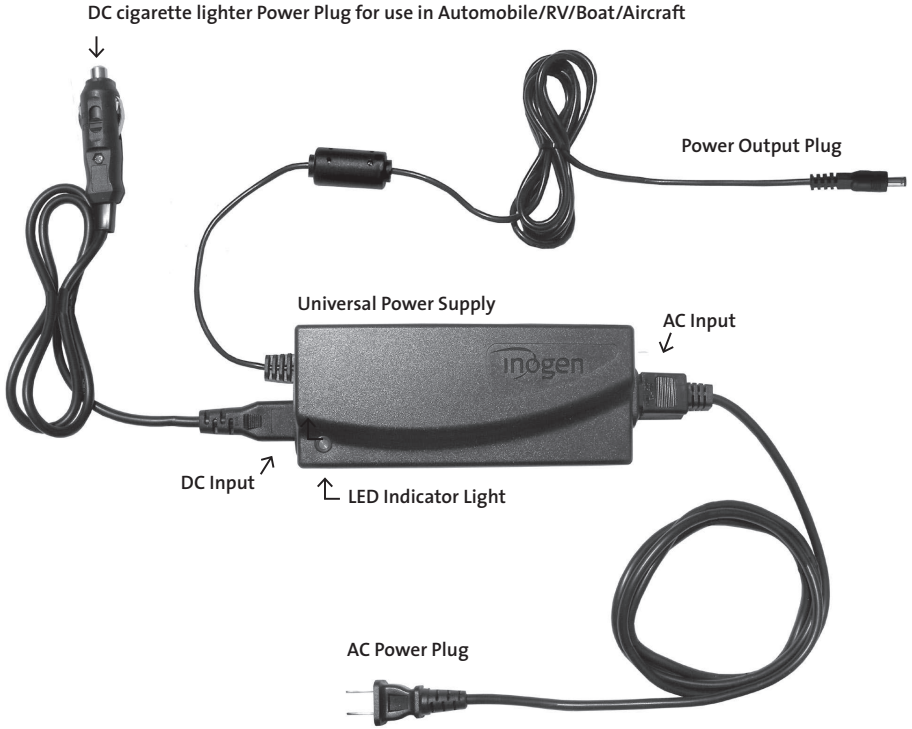
UNIVERSAL POWER SUPPLY

Overview
The Inogen Universal Power Supply (BA-107/207) is used to power the Inogen One® G2 concentrator from an AC power source or a DC power source. This allows the user to power the concentrator in the home, in a vehicle or other places where AC or DC power is available.

Description
The Inogen One® G2 Universal Power Supply is specifically designed for use with the Inogen One® G2 Oxygen Concentrator (IO-200). The Universal Power Supply provides the precise current and voltage required to safely power the Inogen One® G2, and is designed to operate from specified AC and DC power sources. When used with AC power sources, the supply automatically adapts to input voltages from 100V to 240V (50-60HZ) permitting use with most power sources throughout the world.

The Universal Power Supply will charge the Inogen One® G2 Battery when used with AC input power or when used with a DC power supply, such as the one found in your car. Due to aircraft power limitations, the Universal Power Supply cannot be used to charge the Inogen One® G2 Battery when used on an aircraft.

The Universal Power Supply is used with the following components:
- Power Supply with attached power output cable to connect to the Inogen One® G2
- Automobile DC cigarette lighter Power Input Cable
- AC Power Input Cable.



Inogen One® G2 Accessories

WARNING	Do not use power supplies/adapters or accessories other than those specified in this User Manual. The use of non-specified accessories may create a safety hazard and/or impair equipment performance.

Nasal Cannula
A nasal cannula must be used with the Inogen One® G2 to provide oxygen from the concentrator. A single lumen cannula up to 25 feet in length to ensure proper breath detection and oxygen delivery is recommended.

NOTE	Increasing the cannula length may reduce the perceived noise during oxygen bolus delivery.

Carry Bag
The Carry Bag provides a protective cover with a handle and shoulder strap to enable you to carry the Inogen One® G2. The Inogen One® G2 can be operated using battery power during transport with the Carry Bag.

Cart
The Cart has wheels and a telescoping handle to provide easy transport of the Inogen One® G2. The Inogen One® G2 can be operated using battery power during transport. Place the Carry Bag over the Cart. Make sure the Cart handle is inserted between the elastic strap in the back of the carry bag and the front of the carry bag.

Airline DC 4-Pin Power Input Cable
DC 4-Pin power Power Plug for use on selected aircraft. Please check with airline for power port availability.

24 Cell Rechargeable Lithium Ion Battery
The battery will power the Inogen One® G2 without connection to an external power source. When fully charged, the battery will provide 4 to 8 hours of operation. The battery recharges when properly installed in the Inogen One® G2 and the concentrator is connected to AC or DC power. Recharging time is up to 8 hours. See information in the “Battery Care and Maintenance” section.

3 Operating Instructions

General Instructions

1. Place the Inogen One® G2 in a well ventilated location.
Air intake and exhaust must have clear access.
Locate the Inogen One® G2 in such a way that any auditory alarms may be heard.

WARNING	Avoid use of the Inogen One® G2 in presence of pollutants, smoke or fumes. Do not use the Inogen One® G2 in presence of flammable anesthetics, cleaning agents or other chemical vapors.

CAUTION	Do not obstruct air intake or exhaust when operating the device. Blockage of air circulation or proximity to a heat source may lead to internal heat buildup and shutdown or damage to the concentrator.

2. Ensure the particle filter is in place.

CAUTION	Do not operate the Inogen One® G2 without the particle filter in place. Particles drawn into the system may damage the equipment.

3. Install the battery.
Insert the Inogen One® G2 battery by sliding battery into place and locking at bottom of concentrator.

CAUTION	The Inogen One® G2 battery acts as a secondary power supply in the event of a planned or unexpected loss of the AC or DC external power supply. When operating the Inogen One® G2 from an AC or DC external power supply, a properly inserted Inogen One® G2 battery should be maintained in the unit. This procedure will ensure uninterrupted operation and will operate all alarms and alerts in the event of a loss of the external power supply.

NOTE	The Inogen One® G2 Battery requires an initial full charge of uninterrupted charging from an empty state using the Inogen One® G2 on the AC power source. Do not run the Inogen One® G2 on battery power until this initial charging has been completed.

4. Connect the Universal Power Supply.
Connect the AC Power plug to the Universal Power Supply. Connect the AC Power Plug to the power source and connect the Power Output Plug to the Inogen One® G2. The green LED on the Universal Power Supply will be illuminated and a beep will sound from the concentrator.

CAUTION	Ensure the Universal Power Supply is in a well ventilated location as it relies on air circulation for heat dissipation. The Universal Power Supply may become hot during operation. Make sure the Universal Power Supply cools down before handling.

NOTE	It is not recommended to use an AC plug adapter with the Universal Power Supply. Use Inogen specified AC Power Input cables for international use.

CAUTION	The Universal Power Supply is not water resistant.

CAUTION	Do not disassemble the Universal Power Supply. This may lead to component failure and/or safety risk.

CAUTION	Do not place anything in the Universal Power Supply port other than the supplied wall cord. Avoid the use of electrical extension cords with the Inogen One® G2. If an extension cord must be used, use an extension cord that has an Underwriters Laboratory (UL) Mark and a minimum wire thickness of 18 gauge. Do not connect any other devices to the same extension cord.

NOTE	Under certain conditions (see Technical Specifications) the Universal Power Supply may shut down. The green LED will blink or will no longer be illuminated. If this occurs, disconnect the Power Supply for at least 10 seconds and reconnect.

NOTE	When the Universal Power Supply is disconnected from the AC outlet, also disconnect it from the concentrator to avoid unnecessary battery discharge.

5. Connect the nasal cannula tubing to the nozzle fitting.
Nozzle fitting is located next to the handle of the Inogen One® G2. Use of a single lumen cannula up to 25 feet in length to ensure proper breath detection and oxygen delivery is recommended. Additional titration may be needed to ensure proper oxygen delivery when using a particular cannula.

CAUTION	To ensure oxygen flow, ensure that the nasal cannula is properly connected to the nozzle fitting and that the tubing is not kinked or pinched in any way.

CAUTION	Replace the nasal cannula on a regular basis. Check with your equipment provider or physician to determine how often the cannula should be replaced.

6. Turn on your Inogen One® G2 by pressing the ON/OFF Button.
A single short beep will sound after the Inogen logo is displayed. "Please Wait" will appear while the concentrator starts up. The display will indicate the selected flow setting and power condition. Following a brief start-up sequence, a warm up period up to 2 minutes will initiate. During this time period the oxygen concentration is building to, but may not have reached, specification. Additional warm up time may be needed if your Inogen One® G2 has been stored in extremely cold temperatures.

7. Set the Inogen One® G2 Concentrator to the flow rate prescribed by your physician or clinician.
Use the + or – setting buttons to adjust the Inogen One® G2 to the desired setting. The current setting can be viewed on the display.

8. Position the nasal cannula on your face and breathe through your nose.
The Inogen One® G2 will sense the onset of inhalation and deliver a burst of oxygen at a precise time when you inhale. The Inogen One® G2 will sense each breath and continue to deliver oxygen in this manner. As your breathing rate changes, the Inogen One® G2 will sense these changes and deliver oxygen only as you need it. At times, if you inhale very quickly between breaths the Inogen One® G2 may ignore one of the breaths, giving the appearance of a missed breath. This may be normal as the Inogen One® G2 senses and monitors the changes in your breathing pattern. The Inogen One® G2 will normally sense the next breath and deliver oxygen accordingly.

A green light will flash each time a breath is detected. Make certain that the nasal cannula is properly aligned on your face and you are breathing through your nose.

WARNING	If you begin to feel ill or are experiencing discomfort while using this device, consult your physician immediately.

CAUTION	The Inogen One® G2 is designed to provide a flow of high purity oxygen. An advisory alarm, "Oxygen Low", will inform you if oxygen concentration drops. If alarm persists, contact your equipment provider.

General
To remove power, unplug the input cord from its source (i.e., AC wall outlet, car cigarette lighter adapter).

CAUTION	Ensure the Universal Power Supply is powered from only one power source (AC or DC) at any given time. The Universal Power Supply may not operate properly if simultaneously powered using both AC and DC sources.

Additional Operating Instructions

For Use In Home With AC Power
For operation of the Power Supply using an AC power source, follow these instructions:

1. Connect the AC Input to the power supply.
2. Connect the AC Power Plug to the power source and connect the Power Output Plug to the Inogen One® G2. The green LED will be illuminated, indicating the Universal Power Supply has input power.

Traveling With Your Inogen One® G2 System

The Inogen One® G2 System makes travel by plane, boat, car or train more convenient for oxygen users than ever before. Now you get the same quality performance and convenience while on the go that you're used to receiving from your Inogen One® G2 at home. Here are some useful and important instructions for maximizing performance and convenience when using your Inogen One® G2 while traveling.

You should begin planning for a trip with a checklist of items to remember. This checklist should include:

✓Universal Power Supply

✓ Extra Battery(s) if required

✓Important phone numbers, such as those of your physician and home healthcare provider, or providers in the area you will be traveling

✓ Plan for backup oxygen in the event of a prolonged power outage or mechanical failure.

For Use In Automobile/RV/Boat
For operation of the Universal Power Supply using a DC power source, follow these instructions:

1. Connect the DC Input to the power supply.
2. Connect the DC Power Plug (Cigarette Lighter Adapter) to the power source and connect the Power Output Plug to the Inogen One® G2. The green LED will be illuminated, indicating the power supply has input power.

3. The plug should insert into the socket without excessive force and securely remain in place. The Cigarette Lighter Adapter comes with a slide switch pre-adjusted to the narrow position. This will fit most automobile cigarette lighter sockets. If the Cigarette Lighter Adapter is loose in the socket, adjust the switch to the "wide" position.
4. Ensure that the automobile power socket is adequately fused for the Inogen One® G2 power requirements (minimum 15 Amp).

WARNING	The tip of the Cigarette Adapter Plug becomes HOT when in use. Do not touch the tip immediately after removal from an auto cigarette lighter socket.
CAUTION	Ensure the automobile power socket is clean of cigarette ash and the adapter plug fits properly, otherwise overheating may occur.
CAUTION	Do not use the Universal Power Supply with a cigarette plug splitter or with an extension cable. This may cause overheating of the DC power input cable.
CAUTION	Do not jump start the automobile with the Universal Power Supply connected. This may lead to voltage spikes which could shut down and/or damage the Universal Power Supply.
CAUTION	When powering the Inogen One® G2 in an automobile ensure the engine is running. Operating the device without the engine running may drain the car battery.

Traveling By Air
The FAA allows the Inogen One® G2 onboard all U.S. aircraft, here are a few points to make air travel easy.

Planning Your Flight

When flying with the Inogen One® G2, you must inform the airline that you will be using your Inogen One® G2 onboard the aircraft. You must also keep a signed statement from your physician with you that includes:

- Your ability to see/hear alarms and appropriately respond.
- When oxygen use is necessary (all or a portion of the trip).
- Maximum flow rate corresponding to the pressure in the cabin under normal operating conditions.

- A new statement will not be necessary each time you fly, but the statement should be available during every flight.
- Some airlines may equip their aircraft with onboard electrical power. You may have an opportunity to request a seat with a power port which can be used to power your Inogen One® G2. However, availability varies by airline, type of aircraft and class of service. You should check with your airlines for availability and always plan on having sufficient battery power for the duration of your flight, plus a conservative estimate of unanticipated delays.
- Because aircraft use different power port configurations, your Universal Power Supply is equipped for use with two separate DC power adapters – a commonly used cigarette lighter adapter, and a less common four-pin adapter (sold separately). Since it is difficult to determine which type of power supply your aircraft will have, it's a good idea to keep both adapters available when flying.

Before Your Flight

Here are some things to keep in mind the day your flight departs:

- Ensure your Inogen One® G2 is clean, in good condition and free from damage or other signs of excessive wear or abuse.
- Bring enough charged batteries with you to power your Inogen One® G2 for the duration of the flight plus a conservative estimate of unanticipated delays.
- Regional/Commuter airlines do not offer onboard electrical power. If your travel plans call for flights on regional airlines, you will need sufficient battery power for the duration of the flight, plus a conservative estimate of unanticipated delays.

CAUTION	Airlines may not be equipped to provide backup oxygen.

- Arrive at the airport early. Airport security screening personnel may require extra time to inspect your Inogen One® G2.
- While waiting to board your flight, you may be able to conserve battery power by using the Universal Power Supply to power your Inogen One® G2 from an electrical outlet in the airport terminal if available.
- You should inform the airline you will be using your Inogen One® G2. Have your physician letter with you and ready for inspection if requested.

During Your Flight

1. If using airline power port, remove the Battery from the Inogen One® G2 Oxygen Concentrator. Due to aircraft power limitations, the Universal Power Supply cannot be used to charge the Inogen One® G2 Battery when onboard aircraft.
2. Connect the appropriate DC Power Plug for the type of available airline power (see photos on page 7 and 9). Check with airline personnel to ensure compatibility.

• During taxi, takeoff and landing, stow your InogenOne® G2 under the seat in front of you. Your Inogen One® G2 will fit upright under most airline seats. However, if it doesn't fit you may turn it on its side.

• It is not necessary to turn off your Inogen One® G2 during taxi, takeoff and landing if your physician's written statement requires you receive oxygen during these periods.

CAUTION	A change in altitude (for example, from sea level to mountains) may affect total oxygen available to the patient. The Inogen One® G2 has been verified to provide oxygen to specification up to 10,000 ft (3048 m). Consult your physician before traveling to higher or lower altitudes to determine if your flow settings should be changed.

After Your Flight

• Remember to recharge additional batteries you may have used prior to your next flight.

Traveling By Bus, Train or Boat

Contact your carrier to find out about available power port availability.

Battery Operating Instructions

Ensure that the battery is in place and charged. Disconnect the Inogen One® G2 from its power source. While the Inogen One® G2 is operating on battery power, the battery will discharge. The display will indicate the estimated remaining percentage (%) or minutes of use.

When the concentrator detects that the battery life is below 10% remaining, a low priority alert will sound. When the battery is empty, the alert will change to a high priority.

When battery life is low, do one of the following:

- Plug the Inogen One® G2 into an AC or DC power source using the Universal Power Supply.
- Replace the battery with a charged battery after turning off the Inogen One® G2 (by pressing the ON/OFF button).
- If the battery is drained, charge the battery or remove it from the concentrator.

If the Inogen One® G2 is being powered by the Universal Power Supply, batteries will charge during operation. Leaving your Inogen One® G2 plugged in past the full charge time will not harm the concentrator or the battery.

Normal Battery Charging

To ensure that your battery is properly charging, inspect that the correct AC and DC power output plug adapter is being used and that the adapter is properly inserted into the power outlet. Observe the display or lights that indicate charging status.

NOTE	When starting to charge a fully discharged battery, the charging process may start and stop during the first few minutes.

Battery Care and Maintenance

Your Inogen One® G2 Lithium Ion Battery requires special care to ensure proper performance and long life. Use only Inogen One® G2 Batteries with your Inogen One® G2 Concentrator.

Effect of Temperature on Battery Performance

The Inogen One® G2 12-Cell Battery powers the Inogen One® G2 Concentrator from 2 to 4 hours under most environmental conditions. To extend the run-time of your battery, avoid running in temperatures less than 41˚F (5˚C) or higher than 95˚F (35˚C) for extended periods of time.

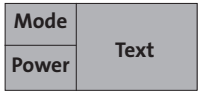
Battery Time Remaining Clock

The Inogen One® G2 continuously displays battery time remaining. This displayed time is only an estimate, and the actual time remaining may vary from this value.

Please Follow These Important Guidelines to Maximize Battery Performance and Life:

- Store battery in a cool, dry place. Store with a charge of 40-50%.
- Once per month: fully charge the battery then discharge to 10% and charge back to full.
- If using multiple batteries, make sure that each battery is labeled (1, 2, 3 or A, B, C, etc.) and rotate on a regular basis. Batteries should not be left dormant for extended periods of time.

4 Inogen One® G2 Oxygen Concentrator Audible and Visible Signals



Display Icons

The Inogen One® G2 display is divided into three areas. The upper left corner of the display shows the breath detection alert status. The lower left corner indicates power source and battery charge level. The right side of the display contains text information, such as flow setting, battery time remaining, and error notifications.

Power Status Icons

These icons are examples of those shown in the display's power status window when the Inogen One® G2 is operating on battery power.

Icon	Meaning
	Battery is empty.
	Battery has less than 10% charge remaining. This icon flashes.
	Battery has approximately 40% to 50% charge remaining.
	Battery is full.

Power Status Icons (continued)

The icons below are examples of those shown when the Inogen One® G2 is operating from an external power supply and charging the battery. The lightning bolt indicates that an external power supply is connected.

Icon	Meaning
	Battery is charging with charge level between 60% and 70%.
	The battery is fully charged and is charging as necessary to maintain its charge.
	Battery is charging with charge level less than 10%.
	The Inogen One® G2 is operating from an external power source with no battery present.

Mode Icons

These are the icons shown in the display's mode window.

Icon	Meaning
	The breath detection alarm has been enabled.
[blank]	The concentrator is in the standard breath detect mode, and the breath detection alert is disabled. This is the default condition.

Display Text

NOTE	When two conditions occur simultaneously, the condition with the higher priority will be displayed.

Informational Messages

The following information displays are not accompanied by any audible feedback or any visual change in the indicator lights.

Message Display & Text	Condition/Action/Explanation
inogen	The Inogen logo is displayed at startup.
Setting X Battery HH:MM	Default display when operating on battery power. "X" represents the selected flow setting (e.g., Setting 2). "HH:MM" represents the approximate time remaining on the battery charge (e.g., 1:45).
Setting X Charging xx (or) Battery Full	Default display when operating on an external power supply and the battery is charging. "xx%" represents the percent battery charge (e.g., 86%).
Setting X Battery xx%	Default display when the battery is not charging or when the time remaining is not available from the battery.
Charging xx% (or) Battery Full	Display when the concentrator is plugged in and being used to charge a battery (not being used for oxygen production). It is normal to see a fully charged battery read between 95% and 100% when external power is removed. This feature maximizes the useful life of the battery.

Notifications

The following notification messages are accompanied by a **single, short beep**.

Message Display & Text	Condition/Action/Explanation
Inogen One® Shutting Down	On/Off button has been pressed for two seconds. Concentrator is performing system shut down.
HH:MM Vx.x	Audible Alarm has been pressed for five seconds.

Low Priority Alerts

The following low priority alert messages are accompanied by a **double beep** and a **solid red light**.

Message Display & Text	Condition/Action/Explanation
External Power Low	External power supply is too low to run the unit, which is running on battery power despite being plugged in. Check external power supply connections. If condition persists, contact your equipment provider.
External Power High	External power supply is too high. Check external power supply connections. If condition persists, contact your equipment provider.
Battery Low Attach Plug	Battery power is low, with less than 10% remaining. Attach external power supply or power down and insert a fully charged battery.
Battery Error See Manual	Battery error has occurred. Switch to a new battery or remove battery and operate concentrator using external power supply. If battery error recurs with same battery, stop using the battery and contact your equipment provider.
Oxygen Low See Manual	Concentrator is producing oxygen at a slightly low level (<82%). If condition persists, contact your equipment provider.

Low Priority Alerts (continued)

Message Display & Text	Condition/Action/Explanation
Remove Battery to Cool	Battery has exceeded its charging temperature and charging has stopped. The battery will not charge while this alert is present but will begin to charge when the battery temperature returns to the normal operating range. If battery charging is desired sooner, remove the battery from the concentrator and allow it to cool in an open area for approximately 10-15 minutes. Then, re-insert the battery into the Inogen One® G2. If the problem still persists, contact your equipment provider.
Comm Error See Manual	Concentrator is producing oxygen but cannot report battery status. Replace battery. If condition persists, contact your equipment provider.
Service Needed	The concentrator requires servicing at the earliest convenience. The concentrator is operating to specification and may continue to be used. Contact your equipment provider to arrange for service.
02 Sensor Fail See Manual	The concentrator's oxygen sensor has malfunctioned. You may continue to use the concentrator. If the condition persists, contact your equipment provider.

Medium Priority Alerts

The following medium priority alert messages are accompanied by a **triple beep**, repeated every 25 seconds, and a **flashing red light**.

Message Display & Text	Condition/Action/Explanation
Battery HOT Warning	Battery has exceeded temperature limit while concentrator is running on battery power. If possible, move concentrator to a cooler location or power unit with an external power supply and remove battery. If condition persists, contact your equipment provider.
No Breath Detect Check Cannula	Concentrator is not detecting a breath. Check that: cannula is connected to concentrator, there are no kinks in tubing, and cannula is positioned properly in your nose. If Satellite Conserver is attached, make sure flow control on concentrator is set to Satellite Mode. This alert may be enabled or disabled through use of the mode button.
System Error See Manual	Concentrator is experiencing an error, but is capable of continued operation. As soon as you are able: • Remove and re-insert battery, and/or • Check external power supply connections. If condition persists, contact your equipment provider.
Oxygen Error Service Needed	Oxygen output concentration is below 50%. If condition persists, switch to your backup oxygen source and contact your equipment provider to arrange for service.

High Priority Alerts

CAUTION If you are not near the Inogen One® G2 you may not be able to hear or see the high priority alerts. Make sure the Inogen One® G2 is in a location where the alerts and alarms will be recognized if they occur.

The following high priority alert messages are accompanied by a **five beep pattern**, repeated every 10 seconds, and a **flashing red light**.

Message Display & Text	Condition/Action/Explanation
Battery Empty Attach Plug	Concentrator has insufficient battery power to produce oxygen. Attach external power supply or exchange battery, then restart unit if necessary by pressing On/Off button.
Battery HOT Shut Down	Battery has exceeded temperature limit while concentrator is running on battery power. Concentrator has stopped producing oxygen. If possible, move concentrator to a cooler location, then turn power off and back on. Ensure air intake and outlet vents have clear access and particle filter is clean. If condition persists, switch to a backup source of oxygen and contact your equipment provider.
System HOT Shut Down	Concentrator temperature is too high, and oxygen production is shutting down. Ensure air intake and outlet vents have clear access and particle filter is clean. If condition persists, switch to a backup source of oxygen and contact your equipment provider.

High Priority Alerts (continued)

Message Display & Text	Condition/Action/Explanation
System COLD Shut Down	This may result from the concentrator being stored in a cold environment (below 0°C (32°F)). Move to a warmer environment to allow the unit to warm up before starting it. If condition persists, switch to a backup source of oxygen and contact your equipment provider.
Error (###) Service Needed	Concentrator has stopped producing oxygen and is shutting down. You should: 1. Note error number 2. Switch to backup oxygen source 3. Contact your equipment provider

5 Troubleshooting

Solutions to some possible issues you may encounter are described in this section.

Inogen One® G2 Oxygen Concentrator

Problem	Possible Cause	Recommended Solution
Any problem accompanied by information on concentrator display, indicator lights, and/or audible signals.	Refer to Chapter 4	Refer to Chapter 4
Concentrator does not power on when On/Off button is pressed	Battery is discharged or no battery is present	Use external power supply or replace battery with one that is fully charged
	Malfunction	Contact your equipment provider
No oxygen	Concentrator is not powered on	Press On/Off button to power concentrator
	Cannula is not connected properly or is kinked or obstructed	Check cannula and its connection to concentrator nozzle

6 Cleaning, Care and Maintenance

Cannula Replacement

Your nasal cannula should be cleaned or replaced on a regular basis. Consult with your physician and/or equipment provider and/or cannula manufacturer's instructions for cleaning and replacement information. A single lumen cannula up to 25 feet in length to ensure proper breath detection and oxygen delivery is recommended.

CAUTION Use of a cannula other than a high flow cannula (e.g. Salter 1600Q) may restrict oxygen delivery and/or attachment to nozzle fittings.

Case Cleaning

You may clean the outside case using a cloth dampened with a mild liquid detergent (such as Dawn) and water.

WARNING Do not submerse the Inogen One® G2 or its accessories in water or allow water to enter into the case; this may lead to electrical shock and/or damage.

WARNING Do not use cleaning agents other than those specified in this User Manual. Do not use alcohol, isopropyl alcohol, ethylene chloride or petroleum based cleaners on the cases or on the particle filters.

Filter Cleaning and Replacement

The particle filter must be cleaned weekly to ensure the ease of air flow. Remove filter from the front of the device. Clean the particle filter with a mild liquid detergent (such as Dawn) and water; rinse in water and dry before reuse.

NOTE	It may be necessary to clean the particle filter more often in dusty environments.

To purchase additional particle filters. Contact your equipment provider or Inogen if you need additional filters.

Output Filter

The output filter is intended to protect the user from inhalation of small particles in the product gas flow. The Inogen One® G2 includes an output filter, conveniently located behind the removable cannula nozzle fitting. Inogen requires that this filter be replaced between patients.

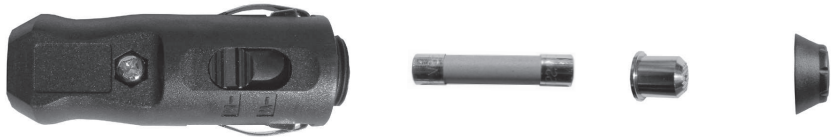
The output filter may be replaced by the equipment provider or by the owner using the Output Filter Replacement Kit (RP-107).

DC Input Cable Fuse Replacement

The Cigarette Lighter DC Power Plug contains a fuse. If the DC Input Cable is being used with a known good power source and the power supply is not operative (no output power and the green LED is not illuminated), the fuse may need to be replaced.

To replace the fuse, follow these instructions and refer to the photograph below.

1. Remove the tip by unscrewing the retainer. Use a tool if necessary.
2. Remove the retainer, tip and fuse.
3. The spring should remain inside the Cigarette Lighter Adapter housing. If the spring is removed, make sure to replace the spring first before inserting the replacement fuse.
4. Install a replacement fuse, Inogen RP#125 (BUSS MDA-12)* and reassemble the tip. Ensure the retainer ring is properly seated and tightened.



Cigarette Adapter Plug **Fuse** **Retainer Tip** **Retainer**

CAUTION	For continued protection against risk of fire, only use fuse specified.

Other Service and Maintenance

WARNING	Do not disassemble the Inogen One® G2 or any of the accessories or attempt any maintenance other than tasks described in the troubleshooting section; disassembly creates a hazard of electrical shock and will void your warranty. Do not remove tamper evident label. For events other than those described in this manual, contact your equipment provider for servicing by authorized personnel.

CAUTION	Do not use lubricants on the Inogen One® G2 or its accessories.

Disposal of Equipment and Accessories

Follow your local governing ordinances for disposal and recycling of the Inogen One® G2 and accessories. If WEEE regulations apply, do not dispose of in unsorted municipal waste. Within Europe, contact the EU Authorized Representative for disposal instructions. The battery contains lithium ion cells and should be recycled. The battery must not be incinerated.

Maintenance Items List

- Inogen One® G2 12 Cell Battery (model # BA- 200)
- Inogen One® G2 24 Cell Battery (model # BA- 224)
- Replacement intake particle filters (model # RP- 200)
- Output Filter Replacement Kit (model # RP-107)

7 Symbols Used On Concentrator and Accessories

Symbol	Meaning
WARNING	A warning indicates that the personal safety of the patient may be involved. Disregarding a warning could result in significant injury.
CAUTION	A caution indicates that a precaution or service procedure must be followed. Disregarding a caution could lead to a minor injury or damage to equipment.
	See Owner Manual for Instructions
	U.S. Federal Regulation Restricts this Device to Sale by Order of Physician. May also be applicable in other Countries.
	AC Power
	DC Power
	No Smoking while device is in use
	No Open Flames (Concentrator); Do not incinerate (Battery)

Symbol	Meaning
	Keep Dry
	Indoor or Dry Location Use Only, Do Not Get Wet
	Use No Oil or Grease
	Do Not Disassemble
	Do Not Dispose of In Unsorted Municipal Waste.
	Type BF Applied Part, Not Intended for Cardiac Application
	Class II Device
	Electrical Safety Agency Certification Logo
	Complies With Applicable EU Directives Including Medical Device Directive

User Interface Label

Symbol	Meaning
	ON / OFF Button
	Display Backlight Button
	Increase Flow Setting
	Decrease Flow Setting
	Audible Alarm Button

8 Inogen One® G2 System Specifications

Inogen One® G2 Concentrator

Dimensions:	L / W / H : 10.7 in (27.3cm) / 3.9 in (10.0cm) / 9.5 in (24.3cm)
Weight:	7.25 pounds (3.3kg) (includes 12 cell battery)
Noise:	Less than 38dBA (as packaged) on setting 2
Warm-Up Time:	2 minutes
Oxygen Concentration:	90% - 3% /+ 6% at all settings
Flow Control Settings:	5 settings: 1 to 5
Power:	Universal Power Supply: AC Input: 100 to 240 VAC 50 to 60 Hz Auto-Sensing: 1.0A DC Input: 13.5-15VDC,10A DC Output: 19 VDC, 5.0A max. Rechargeable Battery: Voltage: 12.0 to 16.8 VDC
Battery Duration:	Up to 4 hours with 12 cell battery Up to 8 hours with 24 cell battery
Battery Charging Time:	Up to 4 hours for a 12 cell battery Up to 8 hours for a 24 cell battery
Environmental Ranges Intended for Use:	Temperature: 41 to 104˚F (5 to 40˚C) Humidity: 0% to 95%, non-condensing Altitude: 0 to 10,000 ft (0 to 3048 meters)
Environmental Ranges Intended for Storage:	Temperature: -4 to 140˚F (-20 to 60˚C) Humidity: 0% to 95%, non-condensing Store in a dry environment
Transportation:	Keep Dry, Handle With Care

Inogen One® G2 Concentrator (continued)

Tested by Independent Laboratory:	Safety: IEC 60601-1 CAN/CSA C22.2 No. 60601-1 Electromagnetic Compatibility: IEC 60601-1-2 RTCA DO 160

Classifications

Mode of Operation:	Continuous Duty
Type of Protection Against Electrical Shock:	Class II
Degree of Protection Against Electrical Shock:	Type BF Not intended for cardiac application
Degree of Protection Against Ingress of Water:	IP20
Degree of Safety for Application in Presence of Anesthetic Gases:	Not suitable for such application

ELECTROMAGNETIC COMPATIBILITY

This CE Marked equipment has been tested and found to comply with the EMC limits for the Medical Device Directive 93/42/EEC [EN 55011 Class B and EN 60601-1-2]. These limits are designed to provide reasonable protection against harmful interference in a typical medical installation.

The equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving device.
2. Increase the separation between the equipment.
3. Connect the equipment into an outlet on a circuit different from that to which the other device(s) is connected.
4. Consult Inogen or your equipment provider for assistance.

CAUTION	Portable and mobile RF communications equipment can affect medical electrical equipment.

CAUTION	Stacking or placing equipment adjacent to other devices is not recommended, where such configurations are necessary, all equipment in question should be carefully observed to ensure that EMI does not degrade performance.

CAUTION	Use of accessories, transducers, and cables other than those specified, with the exception of transducers and cables sold by the manufacturer of the equipment as replacement parts for internal components, may result in increased emissions and decreased immunity of the equipment or system.

Guidance and Manufacturer's Declaration – Electromagnetic Emissions
The Inogen One® G2 Oxygen Concentrator is intended for use in the electromagnetic environment specified below. The customer or the user of the Inogen One® G2 Oxygen Concentrator should assure that it is used in such an environment.

Emissions Test	Compliance	Electromagnetic Environment - Guidance
RF emissions CISPR 11	Group 1	The Inogen One® G2 Oxygen Concentrator uses RF energy only for its internal function. Therefore its RF emissions are very low and not likely to cause any interference in nearby equipment.
RF emissions CISPR 11	Class B	The Inogen One® G2 Oxygen Concentrator is suitable for use in all establishments including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

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